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PRESENCE OF AN ASTRONESTHID FISH IN THE MEDITERRANEAN (GULF OF GENOA): *BOROSTOMIAS* *ANTARCTICUS* (LÖNNB.)

Several fishes, new for the area, have recently been found in the deep zones of the Ligurian Sea, as *Bathypterois*, *Melanostigma*, *Paraliparis*, *Oculospinus*. Some others, as *Polyacanthonotus*, *Echiodon*, *Physiculus* appear to be commoner than hitherto believed. Our present investigations are expected to add new information on this ichthyofauna.

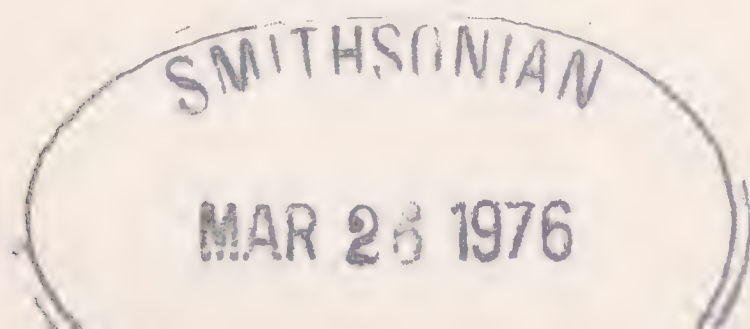
In this note we report the finding of *Borostomias antarcticus* (Lönnb.), a species that deserves a particular mention as it belongs to a family (Astronesthidae: Salmoniformes Stomiatoidei) widely distributed in the oceans but not yet definitely reported from the Mediterranean.

A single specimen was captured in the Gulf of Genoa on June 18th, 1973, by the trawler « Lavoratore Secondo », on day time, between 44° 14' N — 08° 47' E and 44° 13' N — 09° 05' E, at depth of 680-880 meters.

As far fishes are concerned, in the same catch we found chiefly Myctophidae (*Lampanyctus crocodilus*, *Benthosema glaciale*), Macrouridae

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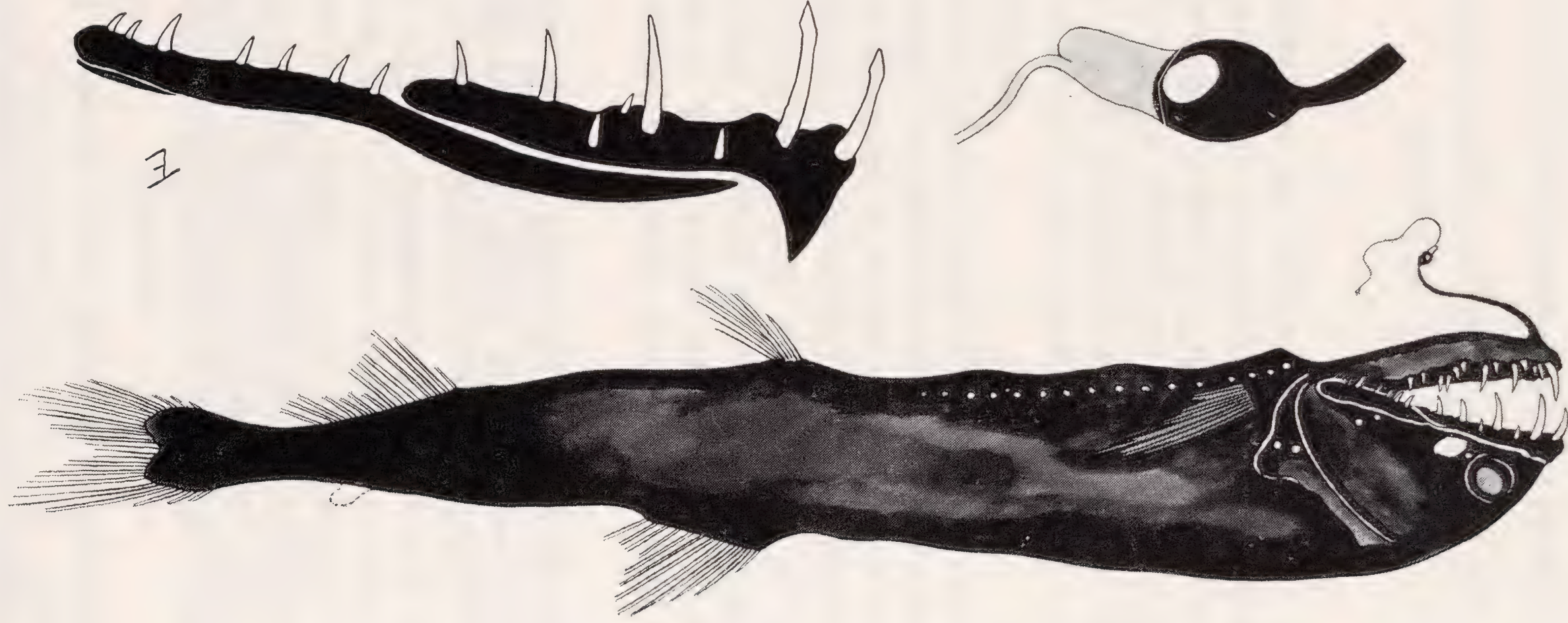
(*Nezumia sclerorhynchus*, *Trachyrhynchus trachyrhynchus*, *Hymenocephalus italicus*) and Notacanthidae (*Notacanthus bonapartei*). Other species were however represented: *Etmopterus spinax*, *Scymnorhinus licha*, *Chauliodus sloanei*, *Cyclothone braueri*, *Argyropelecus hemigymnus*, *Alepocephalus rostratus*, *Notolepis rissoi*, *Phycis blennoides*, *Gaidropsarus biscayensis*, *Merluccius merluccius*, *Conger conger*, *Pagellus centrodontus*, *Symphurus ligulatus*.

Our *Borostomias* is not in very good condition: its snout and fins are damaged and the very thin skin is largely torn off. The chief measurements and meristic data are as follows:

Standard length	mm 119	Maximum height	mm 19,5
Length of head (including the soft lobe along the opercular border)	25,5	Minimum height of caudal peduncle	6,5
Length of premaxillary	13	Diameter of eye	4,5
Barbel:		Number of fin rays:	
length of stem	16	Dorsal	12
» » bulb	2	Anal	14
» » filament	9	Ventral	7
		Pectoral	8

Body compressed, with nearly straight upper and lower profile. Jaws of about the same length. Eight premaxillary teeth, of which five are large and fanglike, chiefly the second one (longest) and the third one; a much smaller tooth between 2nd and 3rd, two small teeth between 3rd and 4th. Seven maxillary teeth, smaller than those on the premaxillary and slightly oblique forward. Lower jaw with irregularly placed teeth of very different size; the anterior one is the largest. Barbel shorter than length of head; the proximal part of the bulb is black and with a photophore on each side, the distal one is narrower and pale; both are of the same length. A very thin filament arises, somewhat laterally, near the end of the bulb.

Border of the opercle very oblique, with a membranous rim forming a well distinct lobe. Gill teeth 5+12, well spaced, pointed, about as long as gill bar, or shorter. As the skin is damaged, we can detect only a single series of 16 small photophores on the anterior part of the side and a few others scattered on the head. Postorbital organ double; anterior part small and hidden, posterior one large and uncovered. Origin of the dorsal fin nearer to caudal base than to apex of snout, and a little



Borostomias antarcticus (Lönnb.). Gulf of Genoa. Only some of the photophores are shown, as not all were detected on this damaged specimen. Lower left, the bulb of the barbel; right, premaxillary and maxillary.

behind the base of the ventral fins. Adipose fin barely seen. Color uniformly black. Small melanophores scattered on dorsal, caudal and anal fins.

The specimen is preserved in the Museum of Natural History, Genoa (Cat. N. 44163).

Borostomias antarcticus was discovered in the southern hemisphere (48° 27' S, 42° 36' W) and described as *Astronesthes antarcticus* by LÖNNBERG (1905, p. 762). Later on, several authors mentioned it and also gave different names to variants of this same species, as shown by the lists of quotations given by GIBBS (1964, p. 334) and by GIBBS and MORROW (1973, p. 127-28). *Borostomias antarcticus* was more than once confused with *Astronesthes richardsoni* Poey (e.g. ROULE et ANGEL, 1933, p. 23, pl. 1, f. 12; FOWLER, 1936, p. 214, f. 97) which is found in another area (Central Western Atlantic) and really belongs to the genus *Astronesthes*.

Borostomias antarcticus is reported from all the oceans, north of 40° N and south of 40° S. As far as the Mediterranean is concerned, only GIBBS (1973) includes this sea in the area of distribution of the species. However, there are no definite records in the literature and GIBBS statement is supported by the existence in the collections of the Oceanographic Museum (Monaco) of a « fine male specimen of *Borostomias antarcticus*, 254 mmSL, catalogue number 5342. The station data were as follows: Large de Monaco, 1000 m, 31 March 1966, Chalut, Physalie » (GIBBS, in litteris).

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RIASSUNTO

Un esemplare di *Borostomias antarcticus* (Lönnb.) (Fam. Astronesthidae) è stato pescato nella parte orientale del Golfo di Genova tra 680 e 880 metri di profondità. Esso viene qui descritto con alcune osservazioni. Non solo questa specie, ma la rispettiva famiglia non era sinora nota in Mediterraneo.

RÉSUMÉ

Un exemplaire de *Borostomias antarcticus* (Lönnb.) (Fam. Astronesthidae) a été pêché dans la zone orientale du Golfe de Gênes entre 680 et 880 metres de profondeur. On donne sa description avec quelques remarques. Non seulement cette espèce mais la famille correspondante était jusqu'ici inconnue en Méditerranée.
